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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,278	10/30/2000	Daniel R. Leger	H0001242	4387

128 7590 08/05/2002

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EXAMINER
TRAN, DALENA

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 08/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/698,278	LEGER ET AL.	
	Examiner	Art Unit	
	Dalena Tran	3661	

BH

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-39 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 2/25/02. As per request, claims 1-2,6,8-9,14,19,24,28,32, and 25 have been amended. Claims 1-39 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, and 3-8, are rejected under Tu (6,014,606) in view of Musland-Sipper (6,313,759), and Simpson et al. (5,999,882).

As per claim 1, Tu discloses an apparatus for providing weather information onboard an aircraft, comprising: a processor unit which processes weather information after it is received onboard the aircraft from a ground-based source (see the abstract; and columns 2-3, lines 59-54). Simpson et al. mention ground-based source containing a plurality of types of weather information (see columns 5-6, lines 49-20). Musland-Sipper mentions a graphical user interface which provides a graphical presentation of the weather information to a user onboard the aircraft, and which includes a user-selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft (see columns 2-4, lines 61-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu by mentions a plurality of types of weather information, and a graphical user interface which provides a graphical presentation of the weather information to a

user onboard the aircraft, and which includes a user-selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft to provide to the pilot variety of weather selection information and the graphical user interface permit data relevant to a flight of the aircraft to be entered by the operator while viewing at least one of the plurality of display configuration for communicating between an aircraft and a ground control station to be more safer instead of oral communication may result in misunderstanding of instruction.

As per claim 3, Musland-Sipper mentions the graphical user interface includes a user-selectable option that allows the user to select what weather information is automatically transmitted from the ground-based source (see columns 2-4, lines 61-55).

As per claim 4, Tu discloses the graphical user interface includes a user-selectable option for displaying the weather information in cross-sectional view along a route of the aircraft (see columns 5-6, lines 52-59).

As per claim 5, Simpson et al. mention the graphical user interface allows the user to view multiple types of weather data simultaneously (see columns 5-6, lines 49-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu by mentions the graphical user interface allows the user to view multiple types of weather data simultaneously to provide the user a full range of weather information along a travel route in real time, therefore, the user can take an appropriate action to detour to another route safely and timely.

As per claim 6, Tu discloses a processor unit which processes weather information after it is received onboard the aircraft from a ground-based source (see the abstract; and columns 2-3,

lines 59-54). Musland-Sipper mentions the graphical user interface includes a user-selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft (see columns 2-4, lines 61-55). Simpson et al. mention a plan view or the weather information and position of the aircraft to a user onboard the aircraft, and which includes a user-selectable option for centering the plan view on the position of the aircraft, even as the position of the aircraft changes (see columns 1-2, lines 29-16; and columns 9-10, lines 46-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu by mentions a plan view or the weather information and position of the aircraft to a user onboard the aircraft, and which includes a user-selectable option for centering the plan view on the position of the aircraft, even as the position of the aircraft changes for assisting the pilot to visualize a location of weather information associated with travel route, therefore the pilot can plan an alternate route in case of bad weather in the region where he / her in at the moment.

As per claim 7, Simpson et al. mention the graphical user interface includes a user-selectable option for orienting the plan view so the aircraft track points upward (see columns 11-12, lines 42-39).

As per claim 8, Tu discloses a processor unit which processes weather information, including three-dimensional weather information, after it is received onboard the aircraft from a ground-based source (see the abstract; and columns 2-3, lines 59-54). Musland-Sipper mentions a graphical user interface includes a user-selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft (see columns 2-4, lines 61-55). Simpson et al. mention provides a plan view of the weather information for a

selected altitude to a user onboard the aircraft, and which includes a user-selectable option for changing the selected altitude (see columns 10-11, lines 65-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu by mentions a plan view of the weather information for a selected altitude to a user onboard the aircraft, and which includes a user-selectable option for changing the selected altitude to provide a user selection of variety of weather information in different route of geographic area, so the user can prepare a flight plan in different route of flight path.

4. Claims 2, 9,14,19,24,28,32, and 35, are rejected under Tu (6,014,606), Musland-Sipper (6,313,759), and Simpson et al. (5,999,882) as applied to claim 1 above, and further in view of Zheng et al. (6,184,816).

As per claim 2, Simpson et al. mention the graphical user interface includes one or more user-selectable option for graphically displaying at least one of weather satellite information, SIGMET information, and winds aloft information (see columns 5-6, lines 49-20). Zheng et al. mention graphically displaying convection information, turbulence information, and icing information (see columns 16-17, lines 30-16).

As per claims 9,14,19,24,28,32, and 35, Tu mentions collecting weather information at a centralized data center (see column 4, lines 3-36). Simpson et al. mention weather information can includes weather satellite information, SIGMET information, and wind aloft information (see columns 5-6, lines 49-20). Zheng et al. mention convection information, turbulence information, and icing information (see columns 16-17, lines 30-16). Musland-Sipper mentions providing a specific request from the aircraft for the weather information, and transmitting the weather information from the data center to an aircraft in response to the request (see columns

2-4, lines 61-55), and graphically displaying the weather information onboard the aircraft (see columns 4-7, lines 56-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu by mentions display many different kinds of weather information to make available convenient displaying current global geographic specific weather conditions and allows pilots to avoid adverse weather along the flight route.

5. Claims 10-31, 33, and 36-39, are rejected under Tu (6,014,606), Musland-Sipper (6,313,759), Simpson et al. (5,999,882), and Zheng et al. (6,184,816) as applied to claim 9 above, and further in view of Ray et al. (5,757,322), and Bateman et al. (6.043,756).

As per claims 10-11, Bateman et al. disclose the convection information that is graphically displayed onboard the aircraft includes information regarding convective activity observation and forecasts (see columns 2-3, lines 66-31).). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Tu, and Musland-Sipper by mentions the convection information that is graphically displayed onboard the aircraft includes information regarding convective activity observation and forecasts for viewing convection information over whole range of geographic area along the flight path.

As per claims 12-13, 17-18,22-23,16-27,29-30,33-34, and 38-39), Ray et al. disclose the weather information is transmitted from the data center to the aircraft via a telephony, and satellite communication link (see columns 3-4, lines 31-67).

As per claims 15-16,20-21, and 36-37, Simpson et al. disclose the weather information that is graphically displayed onboard the aircraft includes information regarding weather observation and forecasts (see columns 7-8, lines 33-15).

As per claim 25, Simpson et al. disclose the weather satellite information that is graphically displayed onboard the aircraft is altitude based (see columns 10-11, lines 65-42).

Remarks

6. Applicant's argument filed on 2/25/02 has been fully considered and they are deemed to be persuasive. However, upon updated search, the new ground of rejection has been set forth as above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30AM),off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

/dt
July 29, 2002

TAN NGUYEN
PRIMARY EXAMINER